

03/06/02  
J1000 U.S. PTO

BOX PATENT APPLICATION

Attorney Docket No.: 24876-A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Benjamin GEBHART

Serial No. Not yet assigned

Filed: March \_\_\_\_\_, 2002

Title: **NUCLEATE BOILING SURFACES FOR COOLING AND GAS GENERATION**

(Divisional of U.S. Patent Application No. 08/485,161, filed June 7, 1995, which in turn is a continuation application of U.S. Patent Application No. 07/767,227, filed on September 27, 1991, and now abandoned, which in turn is a continuation-in-part application of U.S. Patent Application 07/529,787, filed on May 25, 1990, and now abandoned, which in turn is a continuation application of U.S. Patent Application 07/409,980, filed on September 18, 1989, and now abandoned, which in turn is a continuation application of 07/159,713, filed on February 24, 1988, and now abandoned.)

TRANSMITTAL LETTER

The Commissioner for Patents  
Washington, D.C. 20231

Sir:

Submitted herewith for filing in the U.S. Patent and Trademark Office is the following:

- (1) Transmittal Letter;
- (2) Filing Form For Divisional U.S. Patent Application;
- (3) Divisional application including:
  - 55 Pages Application Consisting of:
    - 26 Pages of Textual Specification
    - 5 Pages of 33 Claims
    - 1 page containing the Abstract of the Disclosure
    - 1 page containing the List of Reference Numerals
    - 22 sheets of drawings
- (4) Preliminary Amendment
- (5) Executed Declaration
- (6) Revocation and Power of Attorney
- (7) Copy of Assignment with Notice of Recordation of Assignment;
- (8) Check No. 16338 \$610.00 for filing fee
- (9) Postcard for early notification of serial number.

Respectfully submitted,  
**NATH & ASSOCIATES PLLC**

By: \_\_\_\_\_

Gary M. Nath  
Registration No. 26,965  
Lee C. Heiman  
Registration No. 41,827  
Customer No. 20529

Date: March 6, 2002

NATH & ASSOCIATES PLLC

1030 15<sup>th</sup> Street, NW - 6<sup>th</sup> Floor

Washington, D.C. 20005

GMN/LCH/lis:DIVappl.trans

J1000 U.S. PTO  
10/087242  
03/06/02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:  
Benjamin GEBHART  
Serial No.: Not yet assigned  
Filing Date: March 6, 2002  
Title: **NUCLEATE BOILING SURFACES FOR COOLING AND GAS GENERATION**

FILING FORM

FOR DIVISIONAL U.S. PATENT APPLICATION

Commissioner of Patents  
Washington, D.C. 20231

Sir:

1. This is a Request for filing a
- ☐ Continuation Application under:
    - ☐ 37 CFR § 1.53(b)(1)
  - ☒ Divisional Application under:
    - ☒ 37 CFR § 1.53(b)(1)
  - ☐ Continuation-In-Part (CIP) application
    - ☐ 37 CFR § 1.53(b)(2)

of **prior** ("parent") application:

Serial No. 08/485,161

Filed: June 7, 1995

Entitled: **NUCLEATE BOILING SURFACES FOR COOLING  
AND GAS GENERATION**

(Which in turn is a continuation application of U.S. Patent Application No. 07/767,227, filed on September 27, 1991, and now abandoned, which in turn is a continuation-in-part application of U.S. Patent Application 07/529,787, filed on May 25, 1990, and now abandoned, which in turn is a continuation application of U.S. Patent Application 07/409,980, filed on September 18, 1989, and now abandoned, which in turn is a continuation application of 07/159,713, filed on February 24, 1988, and now abandoned.)

2. ☒ Enclosed for application under 37 CFR §§ 1.53(b) are:
- 33 pages of text (specification, claims, abstract)
  - 33 claims
  - 22 sheets of drawings



*H. Kwon*  
*#3/Pu*  
*Amelt B*  
*6/18/2002*

2002-06-03 10:08:24

3. The **present** application names the following inventor(s):

Benjamin GEBHART

\_\_\_ (37 CFR § 1.53--"CIP") The above-identified application (in which no payment of the Issue Fee, abandonment of or termination of proceedings has occurred) is hereby expressly abandoned as of the filing date of this new application.

The **Total Filing Fee** is calculated as follows:

\_\_\_ Enter the Amendment filed in the prior patent application on \_\_\_\_\_ prior to calculating the filing fee.

XX Enter the enclosed Preliminary Amendment prior to calculating the filing fee.

(Col 1)			(Col 2)	SMALL ENTITY		OR	NON-SMALL ENTITY	
TOTAL	NUMBER OF CLAIMS FILED		NUMBER OF EXTRA CLAIMS	RATE	FEE		RATE	FEE
	28	minus 20	8	x9=	72		x18=	0
INDEP	7	minus 3	4	x42=	168		x84=	0
BASE FILING FEE:				+370=	370		+740=	0
<u>xx</u> Multiple Dependent Claims				+130=	0		+270=	0
				TOTAL	610	OR	TOTAL	0

X Applicant(s) is/are a "small entity". A Verified Statement Claiming Small Entity Status:

X was filed in the parent application, and small entity status is still proper and desired (Rules 60, 62 only);  
 \_\_\_ is filed herewith;  
 \_\_\_ will be filed at a later date.

X A check including the above-indicated filing fee is enclosed.

\_\_\_ A Petition for Extension of Time (to keep the parent case pending) is enclosed, with a check including the \$\_\_\_ extension fee.

\_\_\_ Assignment document(s) is/are submitted herewith, with a check including the recordation fee of \$40.00 per Assignment.

\_\_\_ No check is enclosed. A Declaration and Power of Attorney will be submitted at a later date pursuant to 37 CFR §§ 1.41, 1.53, together with a check for the "Total Filing Fee" calculated above and a surcharge under 37 CFR § 1.16(e).

X The prior application is assigned of record to The Trustees of the University of Pennsylvania; Philadelphia, Pennsylvania, the Assignment being recorded on September 27, 1991, on Reel 5859, Frame(s) 0922.

X A copy of the original executed Declaration is enclosed.

X Amend the specification by inserting before the first line the sentence:

--This application is a Divisional Application of U.S. Patent Application No. 08/485,161, filed June 7, 1995, which in turn is a continuation application of U.S. Patent Application No. 07/767,227, filed on September 27, 1991, and now abandoned, which in turn is a continuation-in-part application of U.S. Patent Application 07/529,787, filed on May 25, 1990, and now abandoned, which in turn is a continuation application of U.S. Patent Application 07/409,980, filed on September 18, 1989, and now abandoned, which in turn is a continuation application of 07/159,713, filed on February 24, 1988, and now abandoned., the entire contents of which are hereby incorporated by reference in its entirety.--

\_\_\_ Foreign priority under 35 U.S.C. § 119 of \_\_\_\_\_ application(s) \_\_\_\_\_, filed \_\_\_\_\_, is hereby claimed. The certified priority paper(s):  
\_\_\_ was/were filed in the parent case;  
\_\_\_ is/are enclosed herewith;  
\_\_\_ will be submitted at a later date.

\_\_\_ The power of attorney in the prior application is to \_\_\_\_.

\_\_\_ The power appears in the original papers in the prior application.

X A copy of the new Revocation of Prior Power of Attorney and Power of Attorney filed in the prior application on February 1, 2002 is enclosed.

X Address all future communications to:

Gary M. Nath  
**NATH & ASSOCIATES PLLC**  
1030 15<sup>th</sup> Street, N.W.- 6<sup>th</sup> Floor  
Washington, D.C. 20005

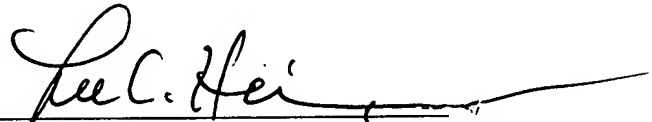
— If extensions of time under 37 CFR § 1.136 other than those provided herewith are required to prevent abandonment of the parent application, then such extensions of time are hereby petitioned to allow copendency of the parent and the present continuing application. The Commissioner is hereby authorized to charge fee deficiency under 37 CFR § 1.17, or credit any overpayment, to Deposit Account No. 14-0112. A duplicate copy of this Form is enclosed.

X The Commissioner is hereby authorized to charge any fee deficiency under 37 CFR §§ 1.16 and 1.17 which may be required, or credit any overpayment, to Deposit Account No. 14-0112. A duplicate copy of this Form is enclosed.

Respectfully submitted,

**NATH & ASSOCIATES PLLC**

Date: March 6, 2002

  
Gary M. Nath  
Registration No. 26,965  
Lee C. Heiman  
Registration No. 41,827  
Customer No. 20529

**NATH & ASSOCIATES PLLC**  
1030 15<sup>th</sup> Street, NW - 6<sup>th</sup> Floor  
Washington, D.C. 20005  
Tel: (202) 775-8383  
Fax: (202) 775-8396  
GMN/LCH/lis:Cont.App

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Benjamin Gebhart

Filed: June 7, 1995

Examiner: John K. Ford

Serial No.: 08/485,161

Group Art Unit: 3743

For: NUCLEATE BOILING SURFACES FOR COOLING AND GAS GENERATION

TRANSMITTAL LETTER

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Submitted herewith for filing in the U.S. Patent and Trademark Office are the following documents:

- (1) Transmittal Letter; and
- (2) Revocation of Prior Power of Attorney and Power of Attorney.

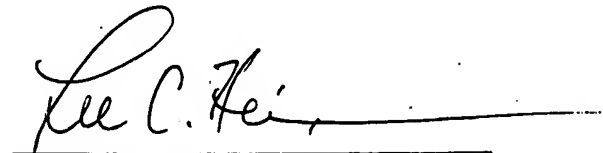
The Commissioner is hereby specifically authorized to charge any required fee, or credit any overpayment, in connection with this matter to deposit Account No. 14-0112.

Respectfully submitted,

NATH & ASSOCIATES PLLC

Date: February 1, 2002

By:



Gary M. Nath  
Reg. No. 26,965  
Lee C. Heiman  
Reg. No. 41,827  
Customer No. 20529

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GMN:LCH RevokePOA.tl.wpd

8-18 A/D 767227



16,910-C USA

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Benjamin Gebhart

Serial No.: N/A

Examiner: N/A

Filed: Herewith

Group Art Unit: N/A

RECEIVED  
21 OCT -9 AM 10:02  
ASSIGNMENT BRANCH

For: NUCLEATE BOILING  
SURFACES FOR  
COOLING AND GAS  
GENERATION

"EXPRESS MAIL" MAILING LABEL NO. B24777604W  
DATE OF DEPOSIT: September 27, 1991  
I HEREBY CERTIFY THAT THIS PAPER OR FEE IS BEING DEPOSITED WITH THE  
UNITED STATES POSTAL SERVICE "EXPRESS-MAIL POST OFFICE TO ADDRESSEE" SERVICE  
UNDER 37 C.F.R. 1.10 ON THE DATE INDICATED ABOVE AND IS ADDRESSED TO THE  
COMMISSIONER OF PATENTS AND TRADEMARKS, WASHINGTON, D.C. 20231  
Kimberly A. St. Clair  
(SIGNATURE) Kimberly A. St. Clair

Box Patent Application  
The Honorable Commissioner  
of Patents and Trademarks  
Washington, D.C. 20231

NEW PATENT APPLICATION TRANSMITTAL LETTER

Dear Sir:

Transmitted herewith for filing is a new patent  
application, together with the following papers and documents:

- [XX] A Certificate of Express Mail (No. B24777604W)
- [XX] 33 pages of the above-identified patent  
application, including the claims
- [XX] 22 sheets of informal drawings
- [XX] An executed Combined Declaration or Oath and Power  
of Attorney
- [XX] An Associate Power of Attorney 93226547
- [XX] An Assignment of the invention to The Trustees of  
the University of Pennsylvania

REF 5859 FRANK 922

[XX] A check in the amount of \$8.00 to cover  
recordation of the Assignment

[XX] Information Disclosure Statement

[XX] Form PTO-1449 (Modified), submitted in duplicate

[XX] References

[ ] Preliminary Amendment

[XX] Verified Statement establishing Small Entity status  
pursuant to 37 C.F.R. §1.9 and 37 C.F.R. §1.27

The filing fee has been calculated as shown below:

FOR:	NO. FILED	NO. EXTRA	SMALL ENTITY			OTHER THAN SMALL ENTITY	
			RATE	FEE	OR	RATE	FEE
BASIC FEE				\$ 315	OR		\$ 630
TOTAL CLAIMS	33 - 20 =	13	x 10=	\$ 130	OR	x 20=	\$
INDEP. CLAIMS	5 - 3 =	2	x 30=	\$ 60	OR	x 60=	\$
FIRST PRESENTATION MULTIPLE DEPENDENT CLAIM			+100=	\$	OR	+200=	\$
			TOTAL	\$ 505	OR		\$

[ ] Please charge my Deposit Account No. 19-5425 in the  
amount of \$\_\_\_\_\_. A triplicate copy of this  
transmittal is attached.

[XX] A check in the amount of \$505.00 is enclosed.  
Please charge any deficiency or credit any  
overpayment to Deposit Account No. 19-5425.

[XX] The Commissioner is hereby authorized to charge any  
additional fees associated with this communication  
or credit any overpayment to Deposit Account No. 19-5425. A triplicate copy of this transmittal is  
attached.

REF 5859 FRAME 923



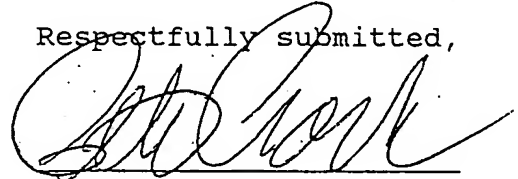
PATENT

16,910-C USA

[XX] Any additional filing fees required pursuant to 37 C.F.R. §1.16 including fees for presentation of extra claims.

[XX] Any patent application processing fees pursuant to 37 C.F.R. §1.17 and under 37 C.F.R. §120(d).

Respectfully submitted,



Peter J. Cronk  
Registration No. 32,021

Dated:

9.27.91

SYNNESTVEDT & LECHNER  
2600 One Reading Center  
1101 Market Street  
Philadelphia, Pennsylvania 19107

(215) 923-4466

1101 Market Street  
Philadelphia, Pennsylvania 19107

REF 5859 FRAME 924